Description

The RAC Chair establishes a set of objectives for each exercise by negotiations with OROs, RAC members, and the licensee. Responsibility for the demonstration of selected objectives is assigned to various participating OROs. Extent-of-play agreements are negotiated, documented, and provided to the evaluator in order to establish the type and level of demonstration for all assigned objectives.

Milestone

The State and licensee submit objectives 90 days prior to the exercise. FEMA and NRC Regional Offices should complete their review of exercise objectives 75 days prior to the exercise. Extent-of-play agreements should also be completed 75 days prior to the exercise.

References

44 CFR Part 350.2 (j), (k), NUREG-0654.

Products

List of specific exercise objectives and extent-of-play agreements for each ORO.

Guidance

There are two levels of participation in REP exercises, full and partial. Full participation primarily refers to each organization demonstrating all of the emergency phase capabilities outlined in its plan, including facility and field based functions. Partial participation primarily means that field activities are not demonstrated.

Plume Pathway Exercises: This guidance applies to exercises when there is no exercise play involving the ingestion exposure pathway and relocation, re-entry and return functions (plume-only exercises).

State and local governments should fully participate in an exercise at one site biennially. For States with more than one site, the State should rotate this full participation among sites and partially participat at all the others. Local governments with plume planning

responsibilities for more than one site may request permission to partially participate. If full participation poses an undue hardship on local governments, requests for exemption from full participation should be submitted to the FEMA Regional Office, which will in turn forward the request to FEMA Headquarters.

When partially participating in an exercise, States do not need to demonstrate field activities (e.g., field radiological monitoring); however, they should demonstrate direction and control, communications, accident assessment, and protective action decision making functions.

Partial participation by local governments (when approved) means that the organization's emergency operating center is activated but thee is limited demonstration of field activities.

Ingestion Pathway Exercises: This guidance applies to exercises involving ingestion exposure pathway protective action decision making and implementation.

A State should fully participate in the ingestion pathway portion of exercises at least once every six years. In States with more than one site, the State should rotate this participation from site to site. Partial participation by a State in ingestion activities at sites within that State is not required. During the year in which the full-participation ingestion exercise is held at one of the sites, the responsible State and local governments should review their plans and procedures for the other sites within the State to verify their accuracy and completeness. This review should validate the identification of farms, food processors and distributors. This review and any resultant revisions should be made and reported in the Annual Letter of Certification, as described in Guidance Memorandum PR-1, as part of their annual review and plan update.

A State that has ingestion-related responsibilities for a site located within its borders and that is also within the 50-mile ingestion exposure pathway of a site located in a bordering State should partially participate in all of the ingestion-related exercises for those bordering State sites. States that do not have a power plant located within their borders, but are located within the 50-mile EPZ of a bordering State's power plant, should fully participate in at least one exercise every six years.

Since local governments are not usually required to develop and test ingestion plans and preparedness, State officials would be the emergency personnel primarily involved in the ingestion portion of exercises. However, in some States, local governments have responsibilities that require their participation in such exercises. The number and function of personnel needed should be sufficient for carrying out those ingestion measures that are necessitated by a particular accident scenario. Also, organizations fully participating

in the ingestion portion of an exercise should deploy field teams to secure and analyze media samples as required by the accident scenario.

As stated above, State officials would be the emergency personnel primarily involved in the ingestion portion of exercises. The number and function of State personnel needed should be determined on the basis of verifying capabilities for carrying out the following responsibilities: direction and control, communications, accident assessment, protective action decision making, and dissemination of emergency information to the general public and or organizations involved with ingestion measures. Organizations partially participating in the ingestion portion of an exercise need not deploy field teams (e.g., to secure and analyze media samples), as such activities can be simulated.

The REP exercise objectives restate, in a functional manner, those planning standards and evaluation criteria of NUREG-0654 that can be demonstrated and observed in exercises. Each objective refers to ORO capabilities to perform emergency functions, such as communicating among response organizations, dose assessment, and alerting and notifying the public, through implementation of plans. REP exercise objectives are outlined in Table 3 beginning on page C.2-6.

Collectively, these objectives cover the full range of functional capabilities that should be demonstrated by OROs participating in exercises conducted to secure or retain FEMA approval of plans and preparedness under the FEMA rule, 44 CFR Part 350.

Group A objectives, numbered 1 - 13, are **core objectives** that should be demonstrated in every biennial exercise by all OROs that have responsibility for them, as reflected in the plan. These core objectives focus on fundamental emergency preparedness capabilities necessary for effective response to radiological emergencies. The only exception to the demonstration frequency for Group A objectives is that States need not demonstrate Objectives 6 and 8 when they are partially participating in an exercise. Objective 34 is a core objective whenever licensee offsite response organization plans are exercised.

Group B objectives, numbered 14 - 22, also focus on fundamental radiological emergency response capabilities and should be demonstrated in every biennial exercise by some organizations. The specific participating organizations are determined by scenario events and exercise play. This contrasts with Group A objectives, which should be demonstrated by all organizations in every biennial exercise. Group B objectives should be demonstrated at least once every six years by every ORO with responsibility for them.

Group C objectives, numbered 23-33, focus on important emergency preparedness capabilities that should be demonstrated at least once every six years, by each organization with responsibility for them, as determined by the organization's plans and procedures.

Steps for Completion of Task 2

This task should be completed in three steps. In Step 1, a set of objectives is established for each exercise. In Step 2, responsible OROs are identified for each objective included in the exercise. In Step 3, extent-of-play agreements for each objective are negotiated to establish the level of demonstration by responsible OROs.

Step 1: Determine objectives to be demonstrated. This step should be completed under the following guidance. With the exception of Objectives 32 and 33, all objectives should be included automatically in each pre-operational exercise for a utility seeking an operating license from the NRC.

In the event that one or more State or local governments within the area covered by the offsite plan for that site are not participating in planning or preparedness for the site, the Licensee Offsite Response Organization Objective (Objective 34) should also be included in the exercise.

Each biennial exercise conducted for **350** approval at a site with an operating license should include demonstration of all Group A and Group B objectives.

Each biennial exercise may also include one or more objectives from Group C, as necessary, to make sure that all OROs that need to demonstrate objectives do so at least once every six years.

Step 2: Identification of the responsible OROs for each objective included in the exercise. This step initially entails identification of the responsible OROs for each objective, based upon their plans. Normally, the plans assign responsibilities for multiple emergency response functions to individual response organizations.

Exercise planners should analyze both the set of objectives and the set of emergency functions in order to make appropriate assignments for objectives to responsible OROs. Demonstration frequencies for each group of objectives (A, B and C) are described on pages C.2-3 and C.2-4.

Step 3: Develop extent-of-play agreements with responsible OROs. For purposes of this Manual, extent of play refers to the degree that actions taken by responsible OROs in response to exercise events should conform to those actions that would be taken, under the plan, in an actual emergency. These actions may be demonstrated (i.e., conducted as they would be in an actual emergency) or simulated.

Extent-of-play agreements should be documented for all OROs seeking to simulate demonstration of specific objectives, under the guidance contained in Section D of this Manual. These agreements should specify the simulation approved for each objective for all participating organizations. Extent-of-play agreements should take into account the provisions regarding field activities in partial-participation exercises, as described in pages C.2-1 and C.2-3 of this Manual.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP A OBJECTIVES

OBJECTIVE 1 (2): MOBILIZATION OF EMERGENCY PERSONNEL

Demonstrate the capability to alert and fully mobilize personnel for both emergency facilities and field operations. Demonstrate the capability to activate and staff emergency facilities for emergency operations.

APPLICATION

All OROs responsible for mobilization of personnel and activation and staffing of facilities should demonstrate this objective at each biennial exercise.

OBJECTIVE 2 (5): FACILITIES - EQUIPMENT, DISPLAYS, AND WORK

Demonstrate the adequacy of facilities, equipment, displays, and other materials to support emergency operations.

APPLICATION

All OROs responsible for emergency facilities should demonstrate this objective at each biennial exercise.

OBJECTIVE 3 (3): DIRECTION AND CONTROL

Demonstrate the capability to direct and control emergency operations.

APPLICATION

All OROs responsible for direction and control of emergency operations should demonstrate this objective at each biennial exercise.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP A OBJECTIVES (continued)

OBJECTIVE 4 (4): COMMUNICATIONS

Demonstrate the capability to communicate with all appropriate emergency personnel at facilities and in the field.

APPLICATION

All OROs responsible for communications should demonstrate this objective at each biennial exercise.

OBJECTIVE 5 (6): EMERGENCY WORKER EXPOSURE CONTROL

Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers.

APPLICATION

All OROs responsible for emergency worker exposure control should demonstrate this objective at each biennial exercise.

OBJECTIVE 6 (7): FIELD RADIOLOGICAL MONITORING - AMBIENT RADIATION MONITORING

Demonstrate the appropriate use of equipment and procedures for determining field radiation measurements.

APPLICATION

All OROs responsible for ambient radiation monitoring should demonstrate this objective when fully participating in a biennial exercise.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP A OBJECTIVES (continued)

OBJECTIVE 7 (10): PLUME DOSE PROJECTION

Demonstrate the capability to develop dose projections and protective action recommendations regarding evacuation and sheltering.

APPLICATION

All OROs responsible for plume dose projection should demonstrate this objective at each biennial exercise.

OBJECTIVE 8 (8,9): FIELD RADIOLOGICAL MONITORING AIRBORNE RADIOIODINE AND PARTICULATE ACTIVITY MONITORING

Demonstrate the appropriate use of equipment and procedures for the measurement of airborne radioiodine concentrations as low as 10⁻⁷ (0.0000001) microcuries per cubic centimeter in the presence of noble gases and obtain samples of particulate activity in the airborne plume.

APPLICATION

All OROs responsible for airborne radioiodine and particulate activity monitoring in the field should demonstrate the objective when fully participating in a biennial exercise. (Demonstration of measurements on these samples by laboratories, under Objective 25, Laboratory Operations, should be demonstrated at least once every six years.)

TABLE 3: REP EXERCISE OBJECTIVES

GROUP A OBJECTIVES (continued)

OBJECTIVE 9 (11): PLUME PROTECTIVE ACTION DECISION MAKING

Demonstrate the capability to make timely protective action decisions (PAD).

APPLICATION

All OROs responsible for plume protective action decision making should demonstrate this objective at each biennial exercise.

OBJECTIVE 10 (12): ALERT AND NOTIFICATION

Demonstrate the capability to promptly alert and notify the public within the 10-mile plume pathway emergency planning zone (EPZ) and disseminate instructional messages to the public on the basis of decisions by appropriate State or local officials.

APPLICATION

All OROs responsible for alerting and notifying the public should demonstrate this objective at each biennial exercise.

OBJECTIVE 11 (13): PUBLIC INSTRUCTIONS AND EMERGENCY

Demonstrate the capability to coordinate the formulation and dissemination of accurate information and instructions to the public.

APPLICATION

All OROs responsible for public instructions and emergency information should demonstrate this objective at each biennial exercise.

Table 3 Continued on Following Page

INF

TABLE 3: REP EXERCISE OBJECTIVES

GROUP A OBJECTIVES (continued)

OBJECTIVE 12 (14): EMERGENCY INFORMATION - MEDIA

Demonstrate the capability to coordinate the development and dissemination of clear, accurate, and timely information to the news media.

APPLICATION

All OROs responsible for providing emergency information to the media should demonstrate this objective at each biennial exercise.

OBJECTIVE 13 (15): EMERGENCY INFORMATION - RUMOR CONTROL

Demonstrate the capability to establish and operate rumor control in a coordinated and timely manner.

APPLICATION

All OROs responsible for rumor control should demonstrate this objective at each biennial exercise.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP B OBJECTIVES

OBJECTIVE 14 (16,17): IMPLEMENTATION OF PROTECTIVE ACTIONS -

USE OF KI FOR EMERGENCY WORKERS.

GENERAL PUBLIC

Demonstrate the capability and resources to implement potassium iodide (KI) protective actions for emergency workers, institutionalized individuals, and, if the State plan specifies, the general public.

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function.

OBJECTIVE 15 (18): IMPLEMENTATION OF PROTECTIVE ACTIONS - SPECIAL POPULATIONS

Demonstrate the capability and resources necessary to implement appropriate protective actions for special populations.

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective in a given exercise are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP B OBJECTIVES (continued)

OBJECTIVE 16 (19): IMPLEMENTATION OF PROTECTIVE ACTIONS -

Demonstrate the capability and resources necessary to implement protective actions for school children within the plume pathway emergency planning zone (EPZ).

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective in a given exercise are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function. An effort should be made to involve every school system and every transportation provider (if different than bus drivers who work for school systems) within the plume EPZ at least once every six years.

Participation of private schools and day care centers in demonstration of this objective is voluntary. As a matter of policy, however, FEMA Regions should encourage the voluntary participation of at least some of these institutions in exercises.

OBJECTIVE 17 (20): TRAFFIC AND ACCESS CONTROL

Demonstrate the organizational capability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective in a given exercise are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP B OBJECTIVES (continued)

OBJECTIVE 18 (21): RECEPTION CENTER -

MONITORING, DECONTAMINATION, AND

Demonstrate the adequacy of procedures, facilities, equipment, and personnel for the radiological monitoring, decontamination, and registration of evacuees.

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective in a given exercise are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function.

OBJECTIVE 19 (22): CONGREGATE CARE

Demonstrate the adequacy of facilities, equipment, supplies, personnel, and procedures for congregate care of evacuees.

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective in a given exercise are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP B OBJECTIVES (continued)

OBJECTIVE 20 (23): MEDICAL SERVICES - TRANSPORTATION

Demonstrate the adequacy of vehicles, equipment, procedures, and personnel for transporting contaminated, injured, or exposed individuals.

APPLICATION

Organizations with responsibility for emergency medical services should annually demonstrate medical services capabilities. During the year in which a biennial exercise is conducted, this objective should be included in the demonstration.

During off-years in which there is no biennial exercise, these capabilities should be demonstrated in a medical emergency drill. As part of the exercise or drill, the capabilities of at least one emergency medical team and transportation service should be demonstrated. The organization responsible for emergency medical services could be either an independent municipality, county or private ambulance company.

Provisions for obtaining credit for response to actual medical emergencies are described in Sections D.20 and D.21 of this Manual.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP B OBJECTIVES (continued)

OBJECTIVE 21 (24): MEDICAL SERVICES - FACILITIES

Demonstrate the adequacy of the equipment, procedures, supplies, and personnel of medical facilities responsible for treatment of contaminated, injured, or exposed individuals.

APPLICATION

The capabilities of medical facilities, equipment supplies, and personnel should be demonstrated annually in an exercise or drill. Provisions for medical emergency drills are described in Section E of this Manual. Either the primary or back-up medical facility capability should be demonstrated on a rotational basis.

During the year that a biennial exercise is conducted, this objective should be demonstrated in that exercise.

If a participating medical facility has both onsite and offsite responsibilities, demonstration of this objective may be combined with demonstration of onsite responsibility.

Provisions for obtaining credit for response to actual medical emergencies are described in Sections D.20 and D.21 of this Manual.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP B OBJECTIVES (continued)

OBJECTIVE 22 (25): EMERGENCY WORKERS, EQUIPMENT, AND VEHICLES - MONITORING AND DECONTAMINATION

Demonstrate the adequacy of procedures for monitoring and decontamination of emergency workers, equipment, and vehicles.

APPLICATION

This objective should be demonstrated in each biennial exercise by some organizations. The specific organizations demonstrating this objective are determined by scenario events and exercise play. This objective should be demonstrated at least once every six years by every ORO with responsibility for this function.

OBJECTIVE 23 (26): SUPPLEMENTARY ASSISTANCE (FEDERAL/OTHER)

Demonstrate the capability to identify the need for external assistance and to request such assistance from Federal or other support organizations.

APPLICATION

All OROs responsible for securing support from outside agencies, organizations, and individuals should demonstrate this objective in a biennial exercise at least once every six years.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP C OBJECTIVES

OBJECTIVE 24 (27): POST-EMERGENCY SAMPLING

Demonstrate the use of equipment and procedures for the collection and transportation of samples from areas that received deposition from the airborne plume.

APPLICATION

All OROs responsible for the collection and transport of samples should demonstrate this objective in a biennial exercise at least once every six years. It is recommended that this objective be demonstrated in an integrated exercise for plume and ingestion pathway measures, as well as relocation, re-entry, and return.

OBJECTIVE 25 (28): LABORATORY OPERATIONS

Demonstrate laboratory operations and procedures for measuring and analyzing samples.

APPLICATION

All OROs responsible for laboratory analysis of field samples should demonstrate this objective in an exercise at least once every six years. It is recommended that this objective be demonstrated in an integrated exercise for plume and ingestion pathway measures, as well as relocation, re-entry, and return.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP C OBJECTIVES (continued)

OBJECTIVE 26 (29): INGESTION EXPOSURE PATHWAY - DOSE

PROJECTION AND PROTECTIVE ACTION

DECISION MAKING

Demonstrate the capability to project dose to the public for the ingestion exposure pathway and to recommend protective actions.

APPLICATION

It is recommended that this objective be demonstrated in an integrated exercise for plume and ingestion pathway measures, as well as relocation, re-entry, and return.

All OROs responsible for projecting ingesting pathway dose and recommending appropriate protective actions should demonstrate this objective in a biennial exercise at least once every six years.

OBJECTIVE 27 (30): INGESTION EXPOSURE PATHWAY - PROTECTIVE ACTION IMPLEMENTATION

Demonstrate the capability to implement protective actions for the ingestion exposure pathway.

APPLICATION

All OROs responsible for implementing appropriate protective actions for ingestion should demonstrate this objective in a biennial exercise at least once every six years. It is recommended that this objective be demonstrated in an integrated exercise for plume and ingestion pathway measures, as well as relocation, re-entry, and return.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP C OBJECTIVES (continued)

OBJECTIVE 28 (32): RELOCATION, RE-ENTRY, AND RETURN - DECISION MAKING

Demonstrate the capability to develop decisions on relocation, re-entry, and return.

APPLICATION

All OROs responsible for determining appropriate measures for controlled relocation, reentry, and return should demonstrate this objective in a biennial exercise at least once every six years. It is recommended that this objective be demonstrated in an integrated exercise for plume and ingestion pathway measures, as well as relocation, re-entry, and return.

OBJECTIVE 29 (33): RELOCATION, RE-ENTRY AND RETURN - IMPLEMENTATION

Demonstrate the capability to implement appropriate measures for relocation, re-entry, and return.

APPLICATION

All OROs responsible for implementation of relocation, re-entry, and return measures should demonstrate this objective in a biennial exercise at least once every six years. It is recommended that this objective be demonstrated in an integrated exercise for plume and ingestion pathway measures, as well as relocation, re-entry, and return.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP C OBJECTIVES (continued)

OBJECTIVE 30 (34): CONTINUOUS, 24-HOUR STAFFING

Demonstrate the capability to maintain staffing on a continuous, 24-hour basis through an actual shift change.

APPLICATION

All OROs responsible for continuous, 24-hour operations should demonstrate this objective in a biennial exercise at least once every six years.

OBJECTIVE 31 (35): OFFSITE SUPPORT FOR THE EVACUATION OF ONSITE PERSONNEL

Demonstrate the capability to provide offsite support for the evacuation of onsite personnel.

APPLICATION

All OROs responsible for assisting with the evacuation of onsite personnel should demonstrate this objective in a biennial exercise at least once every six years. This objective does not have to be demonstrated unless the number of licensee or contract personnel is sufficiently large (i.e., more than 200 as a rule of thumb).

TABLE 3: REP EXERCISE OBJECTIVES

GROUP C OBJECTIVES (continued)

OBJECTIVE 32 (36): UNANNOUNCED EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill.

APPLICATION

All OROs with responsibilities under Objective 1 should demonstrate this objective through either an unannounced exercise or drill at least once every six years. This objective may be combined with the demonstration of Objective 33.

Provisions for obtaining credit for response to actual emergencies are described in Section D.32 of this Manual.

OBJECTIVE 33 (36): OFF-HOURS EXERCISE OR DRILL

Demonstrate the capability to carry out emergency response functions during an off-hours exercise or drill.

APPLICATION

All OROs with responsibilities under Objective 1 should demonstrate this objective through either an off-hours exercise or drill at least once every six years. This objective may be combined with the demonstration of Objective 32.

Provisions for obtaining credit for response to actual emergencies are described in Section D.33 of this Manual.

TABLE 3: REP EXERCISE OBJECTIVES

GROUP C OBJECTIVES (continued)

OBJECTIVE 34 (37): LICENSEE OFFSITE RESPONSE ORGANIZATIONS

Demonstrate the capability of licensee offsite response organization (licensee ORO) personnel to interface with non-participating organizations and accomplish coordination essential for emergency response.

APPLICATION

Licensee OROs are responsible for demonstrating this objective at every biennial exercise in which State or local government OROs are not participating.